

ABSTRACT OF THE DISCLOSURE - A high force traction apparatus which operates along the cable linear axis with no cable bending. The cable is encircled with links from several looping chain drives. The links have a concave friction surface to match the cable radius. Rollers apply pressure to multiple links thereby providing a high normal force on the cable. The staggered and synchronized links keep the high squeeze force evenly distributed. This allows the traction apparatus to impose a pulling force that approaches the cable tensile limit without cable damage.